

EXHIBIT 1

Declaration of Kenneth L. Bressler
in Support of Motion for Sanctions

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

HYPER SEARCH LLC,

Plaintiff,

v.

FOURSQUARE LABS, INC.,

Defendant.

C.A. No. 1:18-cv-01274-CFC

**DECLARATION OF KENNETH BRESSLER IN SUPPORT
OF FOURSQUARE LAB INC.'S MOTION FOR SANCTIONS**

Kenneth L. Bressler declares:

1. I am an attorney at law duly licensed to practice before all courts of New York and admitted to practice *pro hac vice* before this Court. I am a partner in the law firm of Blank Rome LLP, and attorney of record for defendant Foursquare Labs, Inc. I have personal knowledge of the facts set forth herein and, if called as a witness, could testify competently to them.

2. On October 11, 2018, my co-counsel Adam V. Orlacchio, attorney for record for Foursquare, and I had a teleconference with Patrick R. Delaney and Timothy Devlin, counsel for plaintiff Hyper Search LLC, about the merits of this lawsuit.

3. During the call, I explained that the Foursquare system cannot infringe the asserted claims of the of U.S. Patents Nos. 6,792,412 and 8,260,733 because they require a “neural network” and the Foursquare system does not have one.

4. On November 5, 2018, we had a second call with Mssrs. Delaney, Devlin, and Benjamin R. Johnson about the merits of this lawsuit and Foursquare’s motion for sanctions pursuant to Federal Rule of Civil Procedure 11.

5. During the call, I again explained the Foursquare system cannot infringe the asserted claims of the of U.S. Patents Nos. 6,792,412 and 8,260,733 because they require a “neural network” and the Foursquare system does not have one.

6. Counsel for Hyper Search refused to withdraw the complaint.

7. Attached hereto as Exhibit A is a true and correct copy of Foursquare’s November 5, 2018 letter enclosing its draft motion for sanctions pursuant to Federal Rule of Civil Procedure 11(c)(2).

I declare under penalty of perjury that the foregoing is true and correct

Dated: November 30, 2018
New York, New York

/s/ Kenneth L. Bressler
Kenneth L. Bressler

EXHIBIT A

to Declaration of Kenneth L. Bressler in Support of Motion for Sanctions
(Foursquare's November 5, 2018 letter enclosing its draft motion for sanctions)

BLANKROME

1201 N. Market Street | Suite 800 | Wilmington, DE 19801
blankrome.com

Phone: 302-425-6431

Fax: 302-428-5113

Email: Orlacchio@blankrome.com

November 5, 2018

VIA E-MAIL: pdelaney@devlinlawfirm.com; tdevlin@devlinlawfirm.com
AND BY FEDERAL EXPRESS

Patrick R. Delaney
Timothy Devlin
DEVLIN LAW FIRM LLC
1306 North Broom Street, Suite 1
Wilmington, Delaware 19806
(302)449-9010

Re: *Hyper Search LLC v. Foursquare Labs, Inc., C.A. No. 1:18-cv-01274-CFC*

Dear Counsel:

I enclose Foursquare Labs, Inc.'s draft Motion for Sanctions, served pursuant to Federal Rule of Civil Procedure 11(c)(2).

Regards,

/s/ Adam V. Orlacchio

Adam V. Orlacchio (DE ID 5520)

Enclosures

cc: Benjamin R. Johnson (Via Email: bjohnson@tlgiplaw.com)
Craig S. Jepson (Via Email: jepson@tlgiplaw.com)
Jeffrey G. Toler (Via Email: jtoler@tlgiplaw.com)
Kenneth L. Bressler, Esq. (Via Email: kbressler@blankrome.com)
Megan R. Wood, Esq. (Via Email: mwood@blankrome.com)

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

HYPER SEARCH LLC,

Plaintiff,

v.

FOURSQUARE LABS, INC.,

Defendant.

C.A. No. 1:18-cv-01274-CFC

DEFENDANT’S MOTION FOR SANCTIONS

Defendant Foursquare Labs, Inc. (“Foursquare”) hereby moves this Court for sanctions pursuant to Federal Rule of Civil Procedure 11 and 28 U.S.C. § 1927, and for an exceptional case determination under 35 U.S.C. § 285.

The grounds for this motion are set forth in Foursquare’s accompanying Memorandum of Law, the Declaration of Kenneth L. Bressler, the exhibits attached thereto, the Declaration of Matthew Kamen, and the pleadings and papers on file herein.

Del. LR 7.1.1 and Fed. R. Civ. P. 11(c)(2) Certification: Counsel for Foursquare hereby certifies that pursuant to Fed. R. Civ. P. 11(c)(2) the instant motion was served on plaintiff Hyper Search, LLC (“Hyper Search”) on November 5, 2018. Pursuant to Del. LR 7.1.1, counsel for Foursquare conferred with counsel for Hyper Search, in an attempt to reach agreement on the matters set forth herein, however, Hyper Search has failed to withdraw its complaint within the requisite twenty-one days thereby necessitating this motion.

BLANK ROME LLP

Dated: November 5, 2018

/s/ Adam V. Orlacchio

Adam V. Orlacchio (#5520)
1201 N. Market Street, Suite 800
Wilmington, Delaware 19801
(302) 425-6431 Telephone
(302) 425-6464 Facsimile
orlacchio@blankrome.com

*Attorneys for Defendant,
Foursquare Labs, Inc.*

OF COUNSEL:

BLANK ROME LLP
Kenneth L. Bressler
The Chrysler Building
405 Lexington Avenue
New York, New York 10174
(212) 885-5000
kbressler@blankrome.com

Megan R. Wood
1825 Eye Street, NW
Washington, D.C. 20006
(212) 420-2200
mwood@blankrome.com

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

HYPER SEARCH LLC,

Plaintiff,

v.

FOURSQUARE LABS, INC.,

Defendant.

C.A. No. 1:18-cv-01274-CFC

**DEFENDANT'S MEMORANDUM OF LAW
IN SUPPORT OF MOTION FOR SANCTIONS**

BLANK ROME LLP

Adam V. Orlacchio (#5520)
1201 N. Market Street, Suite 800
Wilmington, Delaware 19801
(302) 425-6431 Telephone
(302) 425-6464 Facsimile
orlacchio@blankrome.com

*Attorneys for Defendant,
Foursquare Labs, Inc.*

Dated: November 5, 2018

TABLE OF CONTENTS

	Page(s)
I. INTRODUCTION	1
II. NATURE AND STAGE OF PROCEEDINGS	2
III. SUMMARY OF ARGUMENT	2
IV. STATEMENTS OF FACT	3
A. Hyper Search’s Patents	3
B. Foursquare’s Recommendation System.....	4
C. Meet and Confers between Counsel for Hyper Search and Foursquare	5
V. ARGUMENT	6
A. The Continued Maintenance of this Action Violates Rule 11	6
1. Rule 11 Standard.....	6
2. Hyper Search’s Continued Prosecution of the ’412 and ’733 Patents Despite Non-Infringement is Sanctionable.....	8
3. Hyper Search’s Continued Prosecution of the ’615 Patent Despite Its Indefiniteness is Sanctionable.....	10
B. The Continued Maintenance of this Action Makes this an Exceptional Case under 35 U.S.C. § 285.....	12
C. The Continued Maintenance of this Action Violates 28 U.S.C. § 1927.....	14
VI. CONCLUSION.....	15

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>AdjustaCam, LLC v. Newegg, Inc.</i> , 861 F.3d 1353 (Fed. Cir. 2017).....	13
<i>Amgen, Inc. v. Ariad Pharm., Inc.</i> , 577 F. Supp. 2d 695 (D. Del. 2008).....	8
<i>Balthazar v. Atl. City Med. Ctr.</i> , 137 Fed. App'x 482 (3d Cir. 2005).....	7, 10, 12
<i>Commil USA, LLC v. Cisco Sys., Inc.</i> , 720 F.3d 1361 (Fed. Cir. 2013),.....	12
<i>Eltech Sys. Corp. v. PPG Indus., Inc.</i> , 903 F.2d 805 (Fed. Cir. 1990).....	13, 14
<i>Great W. Mining & Mineral Co. v. ADR Options, Inc.</i> , 533 F. App'x 132 (3d Cir. 2013)	14
<i>H-W Tech., L.C. v. Overstock.com, Inc.</i> , 758 F.3d 1329 (Fed. Cir. 2014).....	11
<i>IPXL Holdings, L.L.C. v. Amazon.com, Inc.</i> , 430 F.3d 1377 (Fed. Cir. 2005).....	10, 11, 12
<i>In re Katz Interactive Call Processing Patent Litig.</i> , 639 F.3d 1303 (Fed. Cir. 2011).....	11
<i>Lewis v. Smith</i> , 2010 U.S. App. LEXIS 27606 (3d Cir. 2010)	14
<i>Loving v. Pirelli Cable Corp.</i> , 11 F. Supp. 2d 480 (D. Del. 1998).....	7
<i>Lumen View Tech., LLC v. Findthebest.com, Inc.</i> , 24 F. Supp. 3d 329 (S.D.N.Y. 2014).....	13
<i>Octane Fitness, LLC v. ICON Health & Fitness, Inc.</i> , 134 S. Ct. 1749 (2014).....	12, 13, 14
<i>Phonometrics, Inc. v. Economy Inns of Am.</i> , 349 F.3d 1356 (Fed. Cir. 2003).....	7

<i>Phonometrics, Inc. v. Westin Hotel Co.</i> , 350 F.3d 1242 (Fed. Cir. 2003).....	13, 14
<i>Telemac Cellular Corp. v. Topp Telecom, Inc.</i> , 247 F.3d 1316 (Fed. Cir. 2001).....	8, 9
<i>W.L. Gore & Assocs., Inc. v. C.R. Bard, Inc.</i> , 231 F. Supp. 3d 19 (D. Del. 2017).....	14
<i>Xiaohua Huang v. Huawei Techs. Co.</i> , 735 F. App'x 715 (Fed. Cir. 2018)	12
Federal Rules of Civil Procedure	
FED. R. CIV. P. 11(c).....	7

I. INTRODUCTION

Plaintiff Hyper Search, LLC (“Hyper Search”) and its attorneys, Toler Law Group and Devlin Law Firm, should be sanctioned under Federal Rule of Civil Procedure 11, 35 U.S.C. § 285 and 28 U.S.C. § 1927 for maintaining this action despite knowing that defendant Foursquare Labs, Inc.’s (“Foursquare”) recommendation system cannot infringe the asserted claims of U.S. Patents Nos. 6,792,412 (“the ’412 Patent”) and 8,260,733 (“the ’733 Patent”) and knowing the asserted claim of U.S. Patent No. 7,120,615 (“the ’615 Patent”) is indefinite as a matter of law.

Each of the asserted claims of the ’412 and ’733 Patents requires a neural network. The claims further require that the neural network use feedback provided by users and readjust automatically how different features of a venue are weighted. As explained below, Foursquare unequivocally does not use a neural network for this purpose. Instead, engineers manually adjust how features of a venue are weighted. Manual manipulation of weights is diametrically opposed to how weights are adjusted in a neural network. Thus, it is impossible for the Foursquare system to infringe the asserted claims of the ’412 and ’733 Patents.

Hyper Search’s continued assertion of the ’615 Patent is equally sanctionable. The asserted claim of the ’615 Patent purports to be a system claim and yet it includes a method step directed to a user action. In other words, it claims two distinct statutory classes of subject matter. Hyper Search and counsel are well-aware that this is impermissible and that the claim is indefinite as a matter of law under controlling Federal Circuit precedent.

Despite their knowledge, Hyper Search and its counsel continue to assert this frivolous case. Hyper Search has left Foursquare no other choice: It had to file this Rule 11 motion to request that the Court dismiss Hyper Search’s Complaint with prejudice and save Foursquare from having to waste resources defending against these frivolous claims.

II. NATURE AND STAGE OF PROCEEDINGS

Hyper Search filed this lawsuit on August 20, 2018. (D.I. 1 (Complaint)). It has accused Foursquare of directly and indirectly infringing claim 1 of the '412 Patent, claim 6 of the '615 Patent, and claim 6 of the '733 Patent by making and inducing its customers to use the Foursquare recommendation system. (*Id.* ¶¶ 39, 48, 71, 80, 103, 113). Foursquare's response to the Complaint is due November 26, 2018. (D.I. 8).

In accordance with Federal Rule of Civil Procedure 11(c)(2), the instant motion was served on Hyper Search on November 5, 2018. Foursquare requested that Hyper Search withdraw its Complaint and Hyper Search failed to do so within the requisite twenty-one days.¹

III. SUMMARY OF ARGUMENT

1. Rule 11 sanctions are appropriate when, as here, a party and its attorneys continue to maintain an action after it is no longer tenable. This action is not tenable because Hyper Search cannot satisfy its burden that Foursquare infringes asserted claims of the '412 and '733 Patents because the Foursquare system does not have a neural network as required by the claims. Further, Hyper Search's assertion of the '615 Patent is not tenable because the asserted claim is indefinite as a matter of law as it a system claim that includes a method step.

2. This case is exceptional and sanctions are warranted under 35 U.S.C. § 285 because Hyper Search and its attorneys are acting in bad faith and manifestly unreasonable by continuing to maintain this action despite knowing Foursquare cannot infringe the asserted claims of '412 and '733 Patents and knowing the asserted claim of the '615 is indefinite.

¹ Foursquare's November 5, 2018 letter enclosing its draft motion for sanctions pursuant to Federal Rule of Civil Procedure 11(c)(2) is attached as Exhibit B to the Declaration of Kenneth L. Bressler ("Bressler Decl."), filed herewith. *See* Bressler Decl. ¶ 10. The Bressler Decl. is attached as Exhibit 1 of this motion.

3. Sanctions are warranted under 28 U.S.C. §1927 because Hyper Search's attorneys are continuing to maintain this action despite knowing Foursquare cannot infringe the asserted claims of '412 and '733 Patents and knowing the asserted claim of the '615 is indefinite.

IV. STATEMENTS OF FACT

A. Hyper Search's Patents

The asserted '412 and '733 Patents purport to provide a system or method that includes a neural network that automatically – without human input – redetermines or modifies weight values given to certain information.

Hyper Search only asserts claim 1 of the '412 Patent against Foursquare. Claim 1 recites:

1. A system for controlling information output based on user feedback about the information comprising:
a plurality of information sources providing information;
at least one neural network module that selects one or more of a plurality of objects to receive information from the plurality of information sources based at least in part on a plurality of inputs and a plurality of weight values;
at least one server, associated with the neural network module, that provides one or more of the objects to one or more recipients;
the recipients enabling for one or more users to generate feedback about the information; and
wherein the neural network module generates a rating value for a plurality of the objects at the end of an epoch, redetermines the weight values using the rating values, and selects which objects to receive information during a subsequent epoch using the redetermined weight values and the inputs for that subsequent epoch.

(D.I. 1017-1 at 24 ('412 Patent claim 1 at col. 19, l. 47-67)).

The only claim from the '733 Patent that Hyper Search asserts against Foursquare is claim 6. (*See* D.I. 1017-6). Claim 6 recites:

6. A method, comprising:
conveying, in response to selection of a first network location, a list of one or more links to respective one or more second network locations;
modifying, as facilitated by one or more processors, at least one weight value associated with a respective at least one node of a neural

network based on selection of a link, of the one or more links, by a device;

learning, by the neural network based on the at least one weight value, that selection of the first network location during respective epochs is followed by selection, according to respective probabilities, of a first subset of the one or more links, the respective epochs comprising durations of time for visits to the first network location by the respective devices; and

conveying, during a subsequent visit to the first network location, a modified list of the one or more links comprising the first subset of the one or more links based on the determining.

(D.I. 1017-5 at 25 ('733 Patent claim 6 at col. 19, l. 61 – col. 20, l. 13)).

The '615 Patent purportedly uses an artificial intelligence module to rank information and sort that information into slots for a user. When the user selects a slot, feedback is provided to the artificial intelligence module, which updates the ranking based on the feedback. Hyper Search only asserts claim 6 of this patent against Foursquare. Claim 6 recites:

6. A system for controlling information output based on user feedback comprising:

a server for providing pieces of information to a recipient via a plurality of slots that present the pieces of information to a user; and

an artificial intelligence module for communicating with the server and for ranking the pieces of information such that the pieces of information are placed in given ones of the plurality of slots,

wherein when one of the slots is selected by the user, such act of selection comprises feedback to the artificial intelligence module about a corresponding piece of information and the artificial intelligence module reranks the pieces of information, and

wherein, in response to a subsequent query, at least one of the pieces of information is either placed in a slot different from a slot in which the piece of information was previously placed and presented to the user as a result of the reranking or not placed in any of the slots presented to the user.

(D.I. 1017-3 at 25 ('615 Patent claim 6 at col. 20, l. 26-46)).

B. Foursquare's Recommendation System

Foursquare provides an online service that makes recommendations to users who are searching for places to go, such as an Italian restaurant in Wilmington, Delaware. (Declaration

of Matthew Kamen (“Kamen Decl.”) ¶ 3 (attached as Exhibit 2 to this motion)). The recommendation system works as follows: When a user executes a search for a nearby Italian restaurant, Foursquare’s server first retrieves a list of all possible candidates that is too long to show the user. (*Id.* ¶ 6). For example, the results would include Italian restaurants that would be too far away from the user. (*Id.*) The system then generates a series of scores based on a restaurant’s many features, including, for example, distance from the user, the restaurant’s popularity, and the number of the user’s friends who have been to the restaurant, whether the user or the user’s friends have previously liked or disliked the restaurant. (*Id.* ¶ 7).

The system then develops a ranking value for each of the restaurants by looking to those features. (*Id.* ¶ 8). Each feature has a preset value (or weight) assigned to it. (*Id.*) Engineers at Foursquare determined the weight value given to each feature or a merged group of features. (*Id.* ¶ 10). For example, assume that twenty of the user’s friends have been to the restaurant. (*Id.* ¶ 8). This twenty-value (or score) is multiplied by a weight value, assume 0.05, to provide a weighted value of 1.0. (*Id.*) As another example, the system may find a restaurant that is two blocks away and one that is fifteen miles away. (*Id.*) This distance-value (or score) for each restaurant is combined with a weight assigned to that feature (i.e., distance from the user), assume again 0.05, to provide a value of -0.02 for the restaurant that is two blocks away and 0.0033 for the restaurant that is fifteen miles away, showing a preference for closer locations. (*Id.*) The final score value, which is a combination of the weighted scores, is then used in determining the order in which the Italian restaurants are presented to the user. (*Id.*)

C. Meet and Confers between Counsel for Hyper Search and Foursquare

On October 11, 2018, counsel for Hyper Search and Foursquare had a meet and confer to discuss the frivolousness of this lawsuit. (*See* Bressler Decl. ¶ 2). During the call, Foursquare’s counsel explained the Foursquare system cannot infringe the asserted claims of the ’412 Patent

and the '615 Patent because they require a “neural network” and the Foursquare system does not have one. (*Id.* ¶ 3). Foursquare’s counsel also explained that the asserted claim of the '615 Patent is indefinite as a matter of law because it includes two statutory classes in a single claim. (*Id.* ¶ 4). Namely, the claim is a system claim and yet requires an act of selection by the user (i.e., a method step). (*Id.*) Foursquare’s counsel further explained that under Federal Circuit precedent a claim that mixes an apparatus and method is indefinite. (*Id.*). Hyper Search’s counsel summarily dismissed this evidence, forcing Foursquare to serve this Rule 11 motion. (*See* Bressler Decl. ¶ 9; Ex. A.).

On November 5, 2018, counsel for Hyper Search and Foursquare had a second meet and confer to discuss the frivolousness of this lawsuit and this Rule 11 motion. (Bressler Decl. ¶ 5). Counsel for Foursquare again requested that Hyper Search withdraw the Complaint because the asserted claims of the '412 and '733 Patents could not be infringed since the Foursquare system does not have a neural network as required by the claims and because the asserted claim of the '615 Patent is indefinite under settled Federal Circuit precedent since it claims two distinct statutory classes of subject matter (i.e., an apparatus and a method step). (*Id.* ¶ 6). Counsel for Hyper Square refused to do so. (*Id.* ¶ 7). Hyper Search’s refusal left Foursquare no other option. Counsel for Foursquare told counsel for Hyper Search that Foursquare would file this motion for sanctions pursuant to Federal Rule of Civil Procedure 11 on November 5, 2018. (*Id.* ¶ 8).

V. ARGUMENT

A. The Continued Maintenance of this Action Violates Rule 11

1. Rule 11 Standard

Pursuant to Federal Rule of Civil Procedure 11, an attorney presenting any “pleading, written motion, or other paper” to the Court certified that he or she has performed “an inquiry reasonable under the circumstances” such that (1) “it is not being presented for any improper

purpose, such as to harass, cause unnecessary delay, or needless increase in the cost of litigation;” (2) “the factual contentions have evidentiary support or, if specifically so identified, will likely have evidentiary support after a reasonable opportunity for further investigation or discovery;” and (3) “the denials of factual contentions are warranted on the evidence or, if specifically so identified, are reasonably based on belief or a lack of information.” FED. R. CIV. P. 11(b)(1), (3) and (4).

The Court is permitted to impose sanctions when Rule 11(b) is violated:

If, after notice and a reasonable opportunity to respond, the court determines that Rule 11(b) has been violated, the court may impose an appropriate sanction on any attorney, law firm, or party that violated the rule or is responsible for the violation.

FED. R. CIV. P. 11(c).

Rule 11 “sanctions are proper when, *inter alia*, a party ‘insists upon a position after it is no longer tenable.’” *Balthazar v. Atl. City Med. Ctr.*, 137 Fed. App’x 482, 490 (3d Cir. 2005) (quoting FED. R. CIV. P. 11 Advisory Committee’s Note). “A litigant’s obligations with respect to the contents of [papers filed with the court] are not measured solely as of the time they are filed with or submitted to the court, but include reaffirming to the court and advocating positions contained in those pleadings and motions after learning that they cease to have any merit.” *Loving v. Pirelli Cable Corp.*, 11 F. Supp. 2d 480, 493 (D. Del. 1998) (alteration in original) (quoting 1993 Advisory Committee Notes to Rule 11); *see also Phonometrics, Inc. v. Economy Inns of Am.*, 349 F.3d 1356, 1363-65 (Fed. Cir. 2003) (affirming order awarding defendant attorneys’ fees and costs under Rule 11 where plaintiff maintained its claim of patent infringement when it was clear plaintiff’s case was untenable following Federal Circuit’s interpretation of patent at issue).

2. Hyper Search's Continued Prosecution of the
'412 and '733 Patents Despite Non-
Infringement is Sanctionable.

To establish infringement of claim 1 of the '412 Patent and claim 6 of the '733 Patent, Hyper Search must prove that every limitation recited in the claims is found in the accused product – Foursquare's recommendation system. *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1330 (Fed. Cir. 2001) (affirming district court's holding that accused product did not infringe asserted patent because it did not satisfy each and every claim limitation); *Amgen, Inc. v. Ariad Pharm., Inc.*, 577 F. Supp. 2d 695, 701 (D. Del. 2008) (granting summary judgment on non-infringement because accused product did not satisfy every claim limitation). As shown below, Hyper Search cannot satisfy its burden.

Both claim 1 of the '412 Patent and claim 6 of the '733 Patent require a "neural network." (D.I. 1017-1 at 24 ('412 Patent claim 1 at col. 19, l. 47-67); D.I. 1017-5 at 25 ('733 Patent claim 6 at col. 19, l. 61 – col. 20, l. 13)). The claims further require that the neural network use feedback provided by users and readjust automatically how different features of a venue are weighted. Specifically, claim 1 of the '412 Patent requires that the neural network "redetermines the weight value using the rating values," and claim 6 of the '733 Patent requires "modifying, as facilitated by one or more processors, at least one weight value associated with a respective at least one node of a neural network based on selection of a link, of the one or more links, by a device." Hyper Search must prove that Foursquare's system has a "neural network" that meets these limitations to succeed on its infringement claims. It cannot, however, do so because Foursquare unequivocally does not use a neural network for this purpose. (*See* Kamen Decl. ¶ 5).

The rating determination method used in the Foursquare system is in no way similar to a neural network. (*Id.* ¶ 9). At Foursquare, the weight given to each feature or a merged group of features does not change unless the company decides to have one of its engineers manually make changes by reviewing search results to see if he or she thinks that the results are not as useful as they can be. (*Id.* ¶ 10). For example, if the search for an Italian restaurant in Wilmington shows as the first result a restaurant that is three miles from where the search takes place, the engineer may give a greater weight to the distance to the restaurant so that restaurants that are closer to the user are recommended. (*Id.*)

Having engineers manually adjust the weight given to certain features is diametrically opposed to the way weights are adjusted in a neural network. (*Id.* ¶ 11). In a neural network, the system itself—as opposed to an engineer—uses the feedback provided by users and readjusts weights automatically. (*Id.*) For example, a neural network would understand from the restaurants chosen by users from the list of recommendations given to them that the users may value the proximity to where they are more than whether their friends have been there and would adjust to give more weight to proximity. (*Id.*) This can be seen in claim 1 of the '412 Patent, which requires that the neural network “redetermines the weight value using the rating values,” and in claim 6 of the '733, which includes “modifying, as facilitated by one or more processors, at least one weight value associated with a respective at least one node of a neural network based on selection of a link, of the one or more links, by a device.” (See D.I. 1017-1 at 24 ('412 Patent claim 1 at col. 19, l. 47-67); D.I. 1017-5 at 25 ('733 Patent claim 6 at col. 19, l. 61 – col. 20, l. 13)). As the Foursquare system does not have a neural network, it cannot infringe the asserted claims of the '412 and '733 Patents. *Telemac Cellular*, 247 F.3d at 1330.

Hyper Search and its counsel had no proof or reason to believe the Foursquare system had a neural network when they filed this lawsuit. In the Complaint, Hyper Search refers to a document titled “Finding the Perfect 10: How We Developed the Foursquare Rating System” as evidence that Foursquare uses a neural network (*see* D.I. 1017-2 at 3). But that article makes clear that Foursquare uses a natural language pipeline in combination with a statistical analysis model known as trinomial logistic regression to determine whether a particular user response is a like, dislike or okay—the three options—and only describes how Foursquare determines the meaning of user feedback on an item. (Kamen Decl. ¶ 12). For example, an “amazing” is turned into a “like” for purposes of ranking the restaurant. (*Id.*) For clarity, trinomial logistic regression is a statistical analysis modelling method and is not a neural network. (*Id.*)

Moreover, since then, there can be no dispute that Hyper Search and its counsel are well-aware that the Foursquare system cannot infringe the asserted claims of the ’412 and ’733 Patents because counsel for Foursquare explicitly told them on two separate occasions that the Foursquare system does not include a neural network. (Bressler Decl. ¶¶ 3, 6). Thus, Hyper Search and its counsel refusal to withdraw the Complaint warrants sanctions under Rule 11 as its position is not “tenable.” *See Balthazar*, 137 Fed. App’x at 490.

3. Hyper Search’s Continued Prosecution of the
 ’615 Patent Despite Its Indefiniteness is
Sanctionable.

Under settled Federal Circuit law, a single claim that covers both an apparatus and a method of using that apparatus is indefinite. *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1384 (Fed. Cir. 2005). The patent claim in *IPXL* recited:

The *system of claim 2* [including an input means] wherein the predicted transaction information comprises both a transaction type and transaction parameters associated with that transaction type, and *the user uses the input means* to either change the predicted transaction information or accept the displayed transaction type and transaction parameter.

Id. (emphasis and alterations in original; internal citations omitted). In other words, the claim is for a system (*i.e.*, electronic financial system) but it includes a limitation directed toward user action (*i.e.*, the user uses the input means). *Id.*

The Federal Circuit held a claim that recites “both a system and the method for using that system” is invalid as indefinite because “it does not apprise a person of ordinary skill” whether infringement “occurs when one creates a system” “or whether infringement occurs when the user actually uses” the system by performing the claimed method steps. *Id.* It therefore found the claim at issue in *IPXL* invalid as indefinite. *Id.*; *see also H-W Tech., L.C. v. Overstock.com, Inc.*, 758 F.3d 1329, 1336 (Fed. Cir. 2014) (affirming indefiniteness of claim to “a tangible computer readable medium” with limitations directed to user actions – “wherein said user completes a transaction with at least one of said merchants listed without the need to generate a voice call” and “wherein said user selects one of said variety of offers associated with said one of said merchants listed”); *In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1318 (Fed. Cir. 2011) (affirming indefiniteness of claims “directed both to systems and to actions performed by ‘individual callers’”).

Claim 6 of the ’615 Patent, like the claim at issue in *IPXL*, is a system claim. (D.I. 1017-3 at 25 (’615 Patent claim 6 at col. 20, l. 26-46)). At the same time, the claim recites at least one method step that must be performed by the user, *i.e.*, an act of selection by the user: “when one of the slots is selected by the user, such act of selection.” (*Id.*) Claim 6 thus mixes two different statutory classes of subject matter – an apparatus and a method. As in *IPXL*, when analyzing infringement of claim 6, it is impossible to determine whether infringement occurs when one creates a system or whether infringement occurs when a user actually uses the system by performing the claimed method step. Claim 6 is therefore invalid as indefinite as a matter of law

and cannot be construed. *See IPXL*, 430 F.3d at 1384. Because asserted claim 6 is invalid, it cannot be infringed. *See Commil USA, LLC v. Cisco Sys., Inc.*, 720 F.3d 1361, 1368 (Fed. Cir. 2013), *vacated in part on other grounds*, 135 S. Ct. 1920 (2015) (“It is axiomatic that one cannot infringe an invalid patent.”).

Hyper Search and its counsel are well-aware that asserted claim 6 of the ’615 Patent is indefinite because counsel for Foursquare explicitly told them on two separate occasions and by email that it impermissibly claims two distinct statutory classes of subject matter. (*See* Bressler Decl. ¶¶ 4, 6, 9; Ex. A). Thus, Hyper Search and its counsel refusal to withdraw the ’615 Patent from the case warrants sanctions under Rule 11 as its position is not “tenable.” *See Balthazar*, 137 Fed. App’x at 490.

B. The Continued Maintenance of this Action Makes this an Exceptional Case under 35 U.S.C. § 285.

The Supreme Court has held “that an ‘exceptional’ case is simply one that stands out from others with respect to the substantive strength of a party’s litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated. District courts may determine whether a case is ‘exceptional’ in the case-by-case exercise of their discretion, considering the totality of the circumstances.” *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1756 (2014). The Supreme Court further explained that “a case presenting either subjective bad faith or exceptionally meritless claims may sufficiently set itself apart from mine-run cases to warrant a fee award.” *Id.* at 1757.

Maintenance of a patent infringement action that has no evidentiary basis makes a case exceptional under 35 U.S.C. § 285. *See, e.g., Xiaohua Huang v. Huawei Techs. Co.*, 735 F. App’x 715, 722 (Fed. Cir. 2018) (affirming award of attorneys’ fees under § 285 where patentee “submitted no evidence of pre-suit investigation,” submitted “no evidence of infringement” and

“litigated the case in a frivolous manner”); *AdjustaCam, LLC v. Newegg, Inc.*, 861 F.3d 1353, 1360-62 (Fed. Cir. 2017) (reversing denial of motion for attorneys’ fees where the record showed that the plaintiff (1) maintained its infringement case even though, as applied to the defendant’s products, the infringement case was baseless after the district court’s claim construction; (2) behaved “dubious[ly]” in litigating the case; and (3) applied a damages model that extracted nuisance-value settlements from many defendants while “continu[ing] to press baseless infringement contentions”); *Eltech Sys. Corp. v. PPG Indus., Inc.*, 903 F.2d 805, 809-10 (Fed. Cir. 1990) (awarding attorney fees where lawsuit was frivolous and supported by no evidence). “The prevailing party may prove the existence of an exceptional case by showing: inequitable conduct before the PTO; litigation misconduct; vexatious, unjustified, and otherwise bad faith litigation; a frivolous suit or willful infringement.” *Phonometrics, Inc. v. Westin Hotel Co.*, 350 F.3d 1242, 1246 (Fed. Cir. 2003) (“*Westin Hotel*”).

In addition, “objective baselessness alone can create a sufficient inference of bad faith to establish exceptionality under § 285.” *Octane*, 134 S. Ct. at 1754 n.4. “Where . . . the patentee is manifestly unreasonable in assessing infringement, while continuing to assert infringement in court, an inference is proper of bad faith, whether grounded in or denominated wrongful intent, recklessness, or gross negligence.” *Lumen View Tech., LLC v. Findthebest.com, Inc.*, 24 F. Supp. 3d 329, 336 (S.D.N.Y. 2014), (citing *Eltech*, 903 at 811), (granting fees where plaintiff’s case was “frivolous and objectively unreasonable” because plaintiff continued to litigate its case despite receiving notice that defendant’s product simply could not infringe plaintiff’s patent – a fact a basic pre-suit investigation would have revealed), *aff’d*, 811 F.3d 479 (Fed. Cir. 2016).

By maintaining this baseless action after learning that infringement of the asserted claims of the ’412 and ’733 Patents is impossible and that the asserted claim of the ’615 Patent is

indefinite as a matter of law, Hyper Search is acting “manifestly unreasonabl[y]” and an “inference is proper of bad faith.” *Eltech*, 903 F.2d at 811. Such bad faith litigation constitutes a preponderance of the evidence warranting an exceptional case determination. *Octane*, 134 S. Ct. at 1758 (prevailing party must prove exceptional case by preponderance of the evidence).

C. The Continued Maintenance of this Action Violates 28 U.S.C. § 1927.

A court may impose sanctions against an attorney under 28 U.S.C. § 1927 “if it concludes that an attorney, in bad faith, ‘unreasonably and vexatiously’ multiplied the proceedings.” *Great W. Mining & Mineral Co. v. ADR Options, Inc.*, 533 F. App’x 132, 134 (3d Cir. 2013) (quoting 27 U.S.C. § 1927 (2013)). Section 1927 requires a finding that counsel’s conduct is “stamped by bad faith that is violative of recognized standards in the conduct of litigation.” *Lewis v. Smith*, 2010 U.S. App. LEXIS 27606 (3d Cir. 2010). “Evidence of bad faith includes [whether]: (1) the claims advanced were meritless; (2) counsel knew or should have known the claims were meritless; and (3) the motive for filing the suit was for an improper purpose, such as harassment.” *Id.* (citing *In re Prudential Ins. Co. Am. Sales Practice Litig. Agent Actions*, 278 F.3d 175, 188 (3d Cir. 2002)). Continuing “to litigate [a] case knowing that its claim c[an] not meet the standard for infringement . . . violate[s] section 1927. . . . When it becomes apparent that discoverable evidence will not bear out the claim, the litigant and his attorney have a duty to discontinue their quest.” *Westin Hotel*, 350 F.3d at 1248 (citing *Avirgan v. Hull*, 932 F.2d 1572, 1582 (11th Cir. 1991)); see also *W.L. Gore & Assocs., Inc. v. C.R. Bard, Inc.*, 231 F. Supp. 3d 19, 23 (D. Del. 2017) (awarding fees under Section 1927 after patentee continued its pursuit of its claim in face of “completely un rebutted evidence to the contrary”). For the same reasons that the continued maintenance of this action violates Rule 11 and 35 U.S.C. § 285, it also violates 28 U.S.C. § 1927.

VI. CONCLUSION

For the foregoing reasons, Foursquare respectfully submits that Hyper Search should be sanctioned under Fed. R. Civ. P. 11 and 35 U.S.C. § 285, and that Hyper Search's attorneys should be sanctioned under Fed. R. Civ. P. 11, 35 U.S.C. § 285 and 28 U.S.C. § 1927.

BLANK ROME LLP

Dated: November 5, 2018

/s/ Adam V. Orlacchio

Adam V. Orlacchio (#5520)
1201 N. Market Street, Suite 800
Wilmington, Delaware 19801
(302) 425-6431 Telephone
(302) 425-6464 Facsimile
orlacchio@blankrome.com

OF COUNSEL:

*Attorneys for Defendant,
Foursquare Labs, Inc.*

BLANK ROME LLP
Kenneth L. Bressler
The Chrysler Building
405 Lexington Avenue
New York, New York 10174
(212) 885-5000
kbressler@blankrome.com

Megan R. Wood
1825 Eye Street, NW
Washington, D.C. 20006
(212) 420-2200
mwood@blankrome.com

EXHIBIT 1

Declaration of Kenneth L. Bressler

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

HYPER SEARCH LLC,

Plaintiff,

v.

FOURSQUARE LABS, INC.,

Defendant.

C.A. No. 1:18-cv-01274-CFC

**DECLARATION OF KENNETH BRESSLER IN SUPPORT OF
FOURSQUARE LAB INC.'S MOTION TO DISMISS AND FOR SANCTIONS**

Kenneth L. Bressler declares:

1. I am an attorney at law duly licensed to practice before all courts of New York. I am a partner in the law firm of Blank Rome LLP, and counsel for defendant Foursquare Labs, Inc. I have personal knowledge of the facts set forth herein and, if called as a witness, could testify competently to them.

2. On October 11, 2018, my co-counsel Adam V. Orlacchio, attorney for record for Foursquare, and I had a teleconference with Patrick R. Delaney and Timothy Devlin, counsel for plaintiff Hyper Search LLC, about the merits of this lawsuit.

3. During the call, I explained that the Foursquare system cannot infringe the asserted claims of the of U.S. Patents Nos. 6,792,412 and 8,260,733 because they require a “neural network” and the Foursquare system does not have one.

4. I also explained that the asserted claim of U.S. Patent No. 7,120,615 is indefinite as a matter of law because it includes two statutory classes in a single claim. Namely, asserted claim 6 is a system claim and yet requires an act of selection by the user (i.e., a method step). I

further explained that under Federal Circuit precedent a claim that mixes an apparatus and method is indefinite.

5. On November 5, 2018, my co-counsels, Adam Orlacchio, attorney for record for Foursquare, and Megan R. Wood, and I had a second teleconference with Patrick R. Delaney, Timothy Devlin, and Benjamin R. Johnson, counsel for plaintiff Hyper Search LLC, about the merits of this lawsuit and Foursquare's motion for sanctions pursuant to Federal Rule of Civil Procedure 11.

6. During the call, I again explained the Foursquare system cannot infringe the asserted claims of the of U.S. Patents Nos. 6,792,412 and 8,260,733 because they require a "neural network" and the Foursquare system does not have one. I also reiterated that asserted claim 6 of U.S. Patent No. 7,120,615 is indefinite under settled Federal Circuit precedent since it claims two distinct statutory classes of subject matter (i.e., an apparatus and a method step). As such, I requested that Hyper Search withdraw the complaint.

7. Counsel for Hyper Search refused to withdraw the complaint.

8. I told counsel for Hyper Search that Foursquare would file its motion for sanctions pursuant to Federal Rule of Civil Procedure 11 on November 5, 2018.

9. Attached hereto as Exhibit A is a true and correct copy of the email chain between myself, counsel for Foursquare, and Patrick R. Delaney, counsel for plaintiff Hyper Search LLC, dated October 11-12, 2018, in which counsel for Foursquare explained why asserted claim 6 of U.S. Patent No. 7,120,615 is indefinite under settled Federal Circuit precedent and in which counsel for Hyper Search rejects Foursquare's arguments regarding infringement and validity of the subject patents.

10. Attached hereto as Exhibit B is a true and correct copy of Foursquare's November 5, 2018 letter enclosing its draft motion for sanctions pursuant to Federal Rule of Civil Procedure 11(c)(2).

I declare under penalty of perjury that the foregoing is true and correct

Dated: November 5, 2018
New York, New York

/s/ Kenneth L. Bressler

Kenneth L. Bressler

EXHIBIT A
to Bressler Declaration

Bressler, Ken

From: Patrick Delaney <pdelaney@devlinlawfirm.com>
Sent: Friday, October 12, 2018 4:26 PM
To: Bressler, Ken; bjohnson@tlgiplaw.com
Cc: Lutsch, Keith E.; Timothy Devlin
Subject: RE: HYPER SEARCH V FOURSQUARE - FOR SETTLEMENT PURPOSES

Ken,

Thank you for reaching out. Although we do not agree with your arguments regarding infringement and validity of the subject patents, we would not object to stipulating to an additional extension. Would two weeks suffice? Please let us know.

Also, if you are prepared to enter settlement negotiations at this stage, please let us know if you are and if you would prefer to work through us or with our client directly in such settlement talks. Thanks.

Best,
Patrick

Patrick R. Delaney
Devlin Law Firm LLC

From: Patrick Delaney
Sent: Thursday, October 11, 2018 5:02 PM
To: 'Bressler, Ken' <kbressler@BlankRome.com>; bjohnson@tlgiplaw.com
Cc: Lutsch, Keith E. <KLutsch@BlankRome.com>; Timothy Devlin <tdevlin@devlinlawfirm.com>; Patrick Delaney <pdelaney@devlinlawfirm.com>
Subject: RE: HYPER SEARCH V FOURSQUARE - FOR SETTLEMENT PURPOSES

Thank you, Ken. We will get back to you by COB tomorrow, as promised.

Best,
Patrick

Patrick R. Delaney
Devlin Law Firm LLC

From: Bressler, Ken <kbressler@BlankRome.com>
Sent: Thursday, October 11, 2018 4:57 PM
To: bjohnson@tlgiplaw.com; Patrick Delaney <pdelaney@devlinlawfirm.com>
Cc: Lutsch, Keith E. <KLutsch@BlankRome.com>
Subject: HYPER SEARCH V FOURSQUARE - FOR SETTLEMENT PURPOSES

As discussed re '615:

The issue is including two statutory classes in a single claim. Referring to page 16 of the attached case, "it is unclear whether infringement . . . occurs when one creates a[n infringing] system, or whether infringement occurs when the user actually uses [the system in an infringing manner]."

Referring to the indicated claim 6, “when one of the slots is selected by the user, such act of selection comprises” in the first wherein element. The claim is a system claim and yet is requiring an act of selection by user. Thus, the claim mixes an apparatus and a method, leading to indefiniteness.

Ken

Kenneth L. Bressler | BLANKROME

The Chrysler Building | 405 Lexington Avenue | New York, NY 10174

O: 212.885.5203 | C: 914.471.3300 | kbressler@blankrome.com

This message and any attachments may contain confidential or privileged information and are only for the use of the intended recipient of this message. If you are not the intended recipient, please notify the Blank Rome LLP or Blank Rome Government Relations LLC sender by return email, and delete or destroy this and all copies of this message and all attachments. Any unauthorized disclosure, use, distribution, or reproduction of this message or any attachments is prohibited and may be unlawful.

EXHIBIT B
to Bressler Declaration

BLANKROME

1201 N. Market Street | Suite 800 | Wilmington, DE 19801
blankrome.com

Phone: 302-425-6431

Fax: 302-428-5113

Email: Orlacchio@blankrome.com

November 5, 2018

VIA E-MAIL: pdelaney@devlinlawfirm.com; tdevlin@devlinlawfirm.com
AND BY FEDERAL EXPRESS

Patrick R. Delaney
Timothy Devlin
DEVLIN LAW FIRM LLC
1306 North Broom Street, Suite 1
Wilmington, Delaware 19806
(302)449-9010

Re: *Hyper Search LLC v. Foursquare Labs, Inc., C.A. No. 1:18-cv-01274-CFC*

Dear Counsel:

I enclose Foursquare Labs, Inc.'s draft Motion for Sanctions, served pursuant to Federal Rule of Civil Procedure 11(c)(2).

Regards,

/s/ Adam V. Orlacchio

Adam V. Orlacchio (DE ID 5520)

Enclosures

cc: Benjamin R. Johnson (Via Email: bjohnson@tlgiplaw.com)
Craig S. Jepson (Via Email: jepson@tlgiplaw.com)
Jeffrey G. Toler (Via Email: jtoler@tlgiplaw.com)
Kenneth L. Bressler, Esq. (Via Email: kbressler@blankrome.com)
Megan R. Wood, Esq. (Via Email: mwood@blankrome.com)

EXHIBIT 2

Declaration of Matt Kamen

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

HYPER SEARCH LLC,

Plaintiff,

v.

FOURSQUARE LABS, INC.,

Defendant.

C.A. No. 1:18-cv-01274-CFC

**DECLARATION OF MATTHEW KAMEN IN SUPPORT OF FOURSQUARE
LAB INC.'S MOTION TO DISMISS AND FOR SANCTIONS**

Matthew Kamen declares:

1. I am the Senior Vice-President of Engineering at Foursquare Lab Inc. I have personal knowledge of the facts set forth herein and, if called as a witness, could testify competently to them.

2. I graduated from Harvard University in 2003. In 2005, I went to work for Goldman Sachs and eventually became the Vice-President of Technology. In 2011, I joined Foursquare and started working on the web team as an individual contributor. In 2016, I became the Vice-President of Enterprise and in 2017 I became Senior Vice-President of Engineering. I am the most senior person in the engineering department.

3. Foursquare provides an online service that makes recommendations to users who are searching for places to go, such as an Italian restaurant in Wilmington, Delaware. This is done by use of either the Foursquare app or through a web page on Foursquare.com.

4. While working at Foursquare for the past seven years I have developed a deep understanding of our technology and how our various products work, including our recommendation service.

5. I understand that Hyper Search sued Foursquare for infringing two patents that involve the use of neural networks “for controlling venue information output based on user feedback about venues, such as restaurants and other entities.” (Complaint ¶7). I find this troublesome as Foursquare unequivocally does not use a neural network for this purpose.

6. Our system works as follows: When a user executes a search for a nearby Italian restaurant, Foursquare’s server first retrieves a list of Italian restaurants. This is a coarse process that generates a list that is too long to show a user. For example, the results would include Italian restaurants that would be too far away from the user.

7. The system then generates a series of scores based on many features such as the restaurant’s distance from the user, the restaurant’s popularity, the number of the user’s friends who have been to the restaurant, and whether the user or the user’s friends have previously liked or disliked the restaurant.

8. The system then develops a ranking for each of the restaurants by looking to various features such as the restaurant’s distance from the user, the restaurant’s popularity, the number of the user’s friends who have been to the restaurant, and whether the user or the user’s friends have previously liked or disliked the restaurant. Each feature has a preset value (or weight) assigned to it. For example, assume that twenty of the user’s friends have been to the restaurant. This twenty-value (or score) is multiplied by a weight value, assume 0.05, to provide a weighted value of 1.0. As another example, the system may find a restaurant that is two blocks away and one that is fifteen miles away. This distance-value (or score) for each restaurant is combined with a weight assigned to that feature (i.e., distance from the user), assume again 0.05, to provide a value of -0.02 for the restaurant that is two blocks away and 0.0033 for the restaurant that is fifteen miles away, showing a preference for closer locations. The final score

value, which is a combination of the weighted scores, is then used in determining the order in which the Italian restaurants are presented to the user.

9. This rating determination method used in the system is in no way similar to a neural network.

10. At Foursquare, the weight given to each feature or a merged group of features is set manually by our engineers and does not change unless we decide to have one of our engineers manually make changes by reviewing search results to see if he or she thinks that the results are not as useful as they can be. For example, if the search for an Italian restaurant in Wilmington shows as the first result a restaurant that is five miles from where the search takes place, the engineer may give a greater weight to the distance to the restaurant so that restaurants that are closer to the user are recommended.

11. Having engineers manually adjust the weight given to certain features is diametrically opposed to the way weights are adjusted in a neural network. In a neural network, the system itself—as opposed to an engineer—uses the feedback provided by users and readjusts weights automatically. For example, a neural network would understand from the restaurants chosen by users from the list of recommendations given to them that the users may value the proximity to where they are more than whether their friends have been there. The neural network would then adjust the weight given to the features to give more weight to proximity.

12. I understand that Hyper Search refers in its complaint to a document titled “Finding the Perfect 10: How We Developed the Foursquare Rating System” as evidence that Foursquare uses a neural network. But that article makes clear that we use a natural language pipeline in combination with a statistical analysis model known as trinomial logistic regression to determine whether a particular user response is a “like,” “dislike,” or okay—the three

options—and only describes how we determine the meaning of user feedback on an item. For example, an “amazing” is turned into a “like” for the purposes of ranking the restaurant. For clarity, trinomial logistic regression is a statistical analysis modelling method and is not a neural network.

I declare under penalty of perjury that the foregoing is true and correct

Dated: November 2, 2018

New York, New York

A handwritten signature in black ink, appearing to read "Matt Kamen", is written above a horizontal line.

Matthew Kamen